
Subject: Re: rebin and !values.f_nan

Posted by [James Kuyper](#) on Mon, 16 Jul 2007 01:42:32 GMT

[View Forum Message](#) <> [Reply to Message](#)

David Fanning wrote:

> Nick writes:

>

>> I have regular arrayed data (1440*720). I'd like to change this data

>> to 360*180 array.

>> So I use 'Rebin' function.

>> But these data have NaN value.

>> If I use Rebin and there is a NaN value, new array becomes also NaN.

>>

>> For example, if there is only one NaN in the old array, the new-array

>> becomes NaN. But I want to make a new array except NaN data. This

>> situation makes residual data wasteful.

>>

>> A = [1.5,2.5,3.6,4,7,8.8,9.0,!values.f_nan]

>> print, rebin(A, 1)

>> ;result is 'NaN'

>> ;That I expected value is mean(A, /nan)

>>

>> Is there any know-how to change array except NaN?

>

> Well, you seem to know how to change your array.

> Why don't you just find the NaNs, change them to

> what you want them to be, then do the REBIN?

I haven't had to do this with IDL, so I didn't realize that IDL handled it inconveniently. What I would normally want to have happen when re-binning data with NaNs is that every element of the output array whose calculation involved one of the NaN's in the input array would itself contain a NaN, while all the other elements of the array would be calculated normally. That's not something that could be achieved by the approach you suggest. If that's a feature not already provided as an option by rebin, it should be.
